

AMENDED IN SENATE APRIL 14, 2009

AMENDED IN SENATE MARCH 18, 2009

SENATE BILL

No. 42

Introduced by Senator Corbett

January 6, 2009

An act to add Division 20.6 (commencing with Section 30970) to the Public Resources Code, relating to coastal resources.

LEGISLATIVE COUNSEL'S DIGEST

SB 42, as amended, Corbett. Coastal resources: ~~seawater intake; once-through cooling.~~

(1) Under the Warren-Alquist State Energy Resources Conservation and Development Act, the State Energy Resources Conservation and Development Commission (energy commission) has the exclusive authority to certify a site for the construction of a new thermal powerplant or the modification of an existing thermal powerplant and related facilities.

The California Coastal Act of 1976 provides for the planning and regulation of development, under a coastal development permit process, within the coastal zone, as defined. The act regulates various types of developments within the coastal zone, including industrial developments and thermal electric generating plants.

This bill would prohibit a state agency, as defined, from authorizing, approving, or certifying a new powerplant or industrial facility, as defined, that uses once-through cooling, as defined, ~~or the expansion of an existing open seawater intake at a powerplant that uses a once-through cooling system unless necessary to connect to an alternative system. The bill would, on and after January 1, 2015, prohibit a powerplant from using once-through cooling, as defined. The bill~~

~~would also prohibit a state agency from authorizing, approving, or certifying the use of a new, expanded, or existing open seawater intake for the purpose of desalination, unless certain findings are made during a public hearing. The bill would require the State Water Resources Control Board (state board) to adopt and implement a schedule to phase out once-through cooling at all powerplants other than those specified~~ *a statewide policy on once-through cooling at coastal and estuarine powerplants.* The bill would also require each regional water board to review and issue a powerplant's national pollutant discharge elimination system (NPDES) permit for its once-through cooling system within 6 months of the expiration of that permit.

(2) Under existing law, the state board and the 9 California regional water quality control boards regulate water quality in accordance with the Porter-Cologne Water Quality Control Act (act) and the federal Clean Water Act. Under the act, the state board is required to adopt specified state policies with respect to water quality as it relates to the coastal marine environment, including a policy requiring coastal powerplants and other industrial installations using seawater for cooling, heating, or industrial processing to use the best available site, design, technology, and mitigation measures feasible to minimize the intake and mortality of all forms of marine life.

Existing law establishes the State Coastal Conservancy in the Natural Resources Agency and authorizes the conservancy to acquire, manage, direct the management of, and conserve specified coastal lands and wetlands in the state. Existing law establishes the Coastal Trust Fund (fund) in the State Treasury to receive and disburse funds paid to the conservancy in trust. Existing law authorizes the conservancy to expend the moneys in the fund for purposes of the San Francisco Bay Area Conservancy Program and for other specified purposes.

This bill would require a powerplant that uses once-through cooling, as defined, to pay a specified fee. ~~The bill would also require an industrial facility that uses open seawater intake to pay a fee.~~ The bill would require the state board to collect the fee and to deposit the revenues from the fee in the Marine Life Restoration Account, which the bill would establish in the fund. The bill would require the conservancy to administer the account and ~~expend the~~ *would authorize* money in the account *to be expended*, only upon appropriation by the Legislature ~~to, by the conservancy and the state board to reimburse their costs of administering the fee, to by the conservancy for specified projects and activities that address the impacts of once-through cooling~~

processes, and to by the state board to provide grants to powerplants currently using once-through cooling, as specified.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The Legislature finds and declares all of the
2 following:

3 (a) Nineteen coastal powerplants located in California use
4 once-through cooling water intake systems. The majority of those
5 powerplants are located on bays and estuaries where there are
6 sensitive fish nurseries and populations of many important species,
7 including species important to the commercial and recreational
8 fishing industries.

9 (b) Coastal powerplants in California collectively withdraw up
10 to 16.3 billion gallons of water per day.

11 (c) The United States Environmental Protection Agency has
12 determined that there are multiple undesirable and unacceptable
13 environmental impacts associated with once-through cooling
14 technology.

15 (d) ~~The Ocean Protection Council and the State Lands~~
16 ~~Commission have passed resolutions~~ *has passed a resolution*
17 expressing concern about the devastating impacts of the
18 once-through cooling process on California's aquatic ecosystems
19 and calling for an expeditious phasing out of once-through cooling
20 systems.

21 (e) Various studies have documented the harm caused by
22 once-through cooling processes, and it is estimated that
23 once-through cooling systems kill over 79 billion fish and other
24 marine organisms annually in California waters.

25 (f) Once-through cooling systems needlessly kill fish, larvae,
26 plankton, and other marine organisms as they are drawn into
27 once-through cooling water intake structures. Once-through cooling
28 systems also kill larger marine species such as sea lions, seals, and
29 turtles as they become trapped by those structures.

30 (g) In enclosed bays and estuaries, such as Alamitos, Santa
31 Monica, San Diego, and Elkhorn Slough, the environmental harm
32 of once-through cooling systems is often more pronounced due to

1 the cumulative impacts caused by the concentration of several
2 powerplants in biologically critical areas.

3 (h) The environmental devastation caused by once-through
4 cooling systems is counterproductive to the California Ocean
5 Protection Act (Division 25 (commencing with Section 35500) of
6 the Public Resources Code), the Marine Life Protection Act
7 (Chapter 10.5 (commencing with Section 2850) of Division 3 of
8 the Fish and Game Code), and other state efforts to ensure healthy
9 aquatic ecosystems and productive fisheries.

10 (i) Steam boiler plants using once-through cooling systems tend
11 to be less efficient and have higher rates of greenhouse gas
12 emissions than new generation sources.

13 (j) Protection of marine life in California's coastal waters,
14 prompt phasing out of once-through cooling systems, and
15 restoration of damage caused to California's aquatic environment
16 are in the best interest of the state.

17 SEC. 2. Division 20.6 (commencing with Section 30970) is
18 added to the Public Resources Code, to read:

19
20 DIVISION 20.6. SEAWATER INTAKE

21
22 CHAPTER 1. DEFINITIONS

23
24 30970. The following definitions govern the interpretation of
25 this division:

26 (a) "Account" means the Marine Life Restoration Account
27 established pursuant to subdivision (c) of Section 30972.

28 ~~(b) "Capacity utilization rate" means the ratio between the~~
29 ~~average annual net generation of power, in megawatthours, and~~
30 ~~the total net capability of the facility to generate power, in~~
31 ~~megawatts, multiplied by the number of hours during the year.~~

32 ~~(c)~~

33 (b) "Conservancy" means the State Coastal Conservancy
34 established pursuant to Section 31100.

35 ~~(d)~~

36 (c) "Fund" means the Coastal Trust Fund established pursuant
37 to subdivision (a) of Section 31012.

38 ~~(e)~~

39 (d) "Industrial facility" includes, but is not limited to, a
40 desalination facility. "Industrial facility" does not include a

1 scientific research facility or a recreational facility, such as an
2 aquarium.

3 ~~(f)~~

4 (e) “Once-through cooling” means a system that uses an open
5 seawater intake to pump seawater from an ocean, estuary, or bay
6 and then discharges the water after only one cycle of cooling.

7 ~~(g) “Open seawater intake” means a conduit for seawater intake~~
8 ~~that is above the seafloor. “Open seawater intake” does not include~~
9 ~~a well, gallery, or any other subseafloor seawater intake.~~

10 ~~(h)~~

11 (f) “Powerplant” means an electrical generating facility,
12 including a nuclear thermal powerplant.

13 ~~(i)~~

14 (g) “Seawater” means saltwater that resides in the ocean, an
15 estuary, or a bay within the waters of the state.

16 ~~(j)~~

17 (h) “State agency” means the state or ~~any~~ *an* agency or
18 department of the state.

19 ~~(k)~~

20 (i) “State board” means the State Water Resources Control
21 Board established pursuant to Section 175 of the Water Code.

22
23 CHAPTER 2. ~~OPEN SEAWATER INTAKE~~ *ONCE-THROUGH*
24 *COOLING*
25

26 30971. Notwithstanding any other provision of law, a state
27 agency shall not authorize, approve, or certify ~~any of the following~~:

28 ~~(a) A~~ a new powerplant or a new industrial facility that first
29 commences operation on and after January 1, 2010, if that
30 powerplant or industrial facility would use once-through cooling.

31 ~~(b) The expansion of an existing open seawater intake at a~~
32 ~~powerplant, unless the expansion is necessary to convert a~~
33 ~~once-through cooling system to an alternative cooling system.~~

34 30971.1. A state agency shall not authorize, approve, or certify
35 the use of a new, expanded, or existing open seawater intake for
36 the purpose of desalination unless it has made, during a public
37 hearing, supported by substantial evidence in the record, the
38 following findings: ____.

39 30971.5. (a) On and after January 1, 2015, a powerplant with
40 an average annual capacity utilization rate of 20 percent or less

1 from the year 2006 to the year 2008, inclusive, shall not use a
2 once-through cooling system.

3 (b)

4 30971.5. (a) The state board shall expeditiously, and no later
5 than March 1, 2010, adopt and implement a schedule to phase out
6 once-through cooling at all powerplants other than those described
7 in subdivision (a). *statewide policy on once-through cooling at*
8 *coastal and estuarine powerplants in consultation with the*
9 *California Energy Commission and other relevant agencies.*

10 (c)

11 (b) Each regional water board shall review and reissue a
12 powerplant's national pollutant discharge elimination system
13 (NPDES) permit for that powerplant's once-through cooling system
14 within six months of the expiration of that permit, or by July 1,
15 2010, for those permits expired as of January 1, 2010. The permit
16 shall address only the following:

17 (1) The use of open seawater intake for cooling purposes by a
18 powerplant.

19 (2) ~~The incorporation of the phaseout dates for once-through~~
20 ~~cooling pursuant to this section.~~

21 (3)

22 (2) The full implementation of cooling water intake structure
23 requirements in Section 316(b) of the federal Clean Water Act (33
24 U.S.C. Sec. 1344 ~~et. et seq.~~), as that section read on October 18,
25 1972, and consistent with the best professional judgment of the
26 regional water boards, until applicable final regulations are adopted
27 and implemented by the United States Environmental Protection
28 Agency.

29
30 CHAPTER 3. ~~SEAWATER INTAKE FEE ONCE-THROUGH COOLING~~

31 FEE

32
33 30972. (a) Each operator of a powerplant using a once-through
34 cooling system shall pay to the state board a fee that is based on
35 the amount of seawater, as determined by the state board, that is
36 removed by the powerplant for purposes of once-through cooling.

37 (b) ~~An industrial facility, approved by a state agency after~~
38 ~~January 1, 2010, using an open seawater intake shall pay to the~~
39 ~~state board a fee that is based on the amount of seawater, as~~

1 ~~determined by the state board, that is removed by that facility's~~
2 ~~open seawater intake.~~

3 (e)

4 (b) ~~The fee for seawater taken by an open seawater intake or~~
5 ~~used for once-through cooling shall be _____ (\$_____) per gallon~~
6 ~~assessed on a per gallon basis, and the amount of the fee shall be~~
7 ~~set by the state board in consultation with the conservancy, by~~
8 ~~regulation, in accordance with the rulemaking provisions of the~~
9 ~~Administrative Procedure Act (Chapter 3.5 commencing with~~
10 ~~Section 11340) of Title 2 of Division 3 of the Government Code).~~

11 (d)

12 (c) The state board shall collect the fee in a manner determined
13 by the state board and, after payment of its administrative costs of
14 collection, deposit the revenue from the fee in the Marine Life
15 Restoration Account, which is hereby created in the fund.

16 (e)

17 (d) The fees required pursuant to this division shall not be
18 considered as a mitigation for the impact associated with
19 once-through cooling or open seawater intake, and shall not
20 diminish an obligation to account for or mitigate the impact
21 pursuant to any other law.

22 30973. (a) The account shall be administered by the
23 conservancy.

24 (b) The moneys in the account shall be expended, only upon
25 appropriation by the Legislature in the annual Budget Act, as
26 follows:

27 (1) By the conservancy and the state board, to reimburse the
28 costs of administration and implementation of this division.

29 (2) By the conservancy, for direct expenditure and award of
30 grants for projects and activities, as authorized by the Ocean
31 Protection Council, that address the negative impacts of
32 once-through cooling systems on the mortality of all forms of
33 marine life and marine habitat.

34 (3) By the state board to provide grants to powerplants currently
35 using once-through cooling if the powerplant can certify that it is
36 repowering for more efficient, cleaner generating equipment that
37 does not use once-through cooling.